Progress Report

A. Project Identifiers:

1) Award Number: NA16FX1409
2) Grant Program: SSLRI Program
3) Name of Recipient Organization: University of Alaska Fairbanks
4) Principal Investigator: Brenda Konar, Kate Wynne, Sue Hills
5) Project Title: Fish assemblages associated with sea lion haul-outs
6) Funding: federal $175,559 match: approx. 5K (GAP project), 6K (PCCRC)
7) Award Period: 1 June 2001 to 31 May 2003
8) Period covered by this report: December 2001 to May 31 2002

B. Project Summary

Steller sea lions (SSL) from the endangered western Alaska stock eat a variety of prey - some of commercial value others not. A common link among them is that these known prey species spawn, grow, or spend their entire lives in shallow and subtidal waters, including species whose commercial harvest is being restricted to reduce potential competition with SSL. These shallow nearshore waters, their algal cover, and fish/prey inhabitants may be of particular importance to SSL pups that use the area immediately adjacent to haulouts extensively in their first year while developing their diving and foraging abilities. Despite their potential importance to young sea lions, prey availability and other ecological attributes of nearshore SSL habitat have not been well described. One reason is that these areas are generally too shallow and rocky for standard large-vessel acoustic and trawl prey surveys.

In this study we are using SCUBA-based surveys to quantify juvenile and adult fish species present in nearshore waters adjacent to two sea lion haul-outs. Seasonal prey availability and biological and physical parameters at these sites will be used to describe nearshore habitat used by young sea lions for shelter, prey, and training. These will compared to results of similar surveys we are conducting at two nearby sites not used by Steller sea lions as haulouts as a means of assessing key components of traditionally used haulout habitat. Our SCUBA surveys have been coordinated to coincide with and augment ongoing research on Steller sea lion diets, foraging patterns, and offshore prey availability.

C. Summary of Progress and Results

Since the last progress report, we have had two successful cruises. The first was in March 2001 after the SSLRI meeting. Our second was in May 2002. During both of these cruises we were able to sample all of our control and haul-out sites. In the last two cruises, we had hoped to find schooling fish so that we could try our diver-assisted trawl but have not found any since the initial sampling cruise in July 2001. We are expecting to see some on our next trip in July so this will give a chance to attempt this experimental method. In our last cruise in May, we did start quantifying octopus abundance.

Data collected thus far have been put into a database and are currently being analyzed. We have acquired much fish and benthic community data and look forward to publishing in the near future. The graduate student who is working on this project

is putting together an oral presentation to give at the upcoming American Fisheries Society meeting in October.

D. Problems

In the last 6 months, we have had no problems. The larger vessel that we have been chartering allows us to go out on days with a larger swell than our smaller boat was allowing. We are planning to charter another vessel in July with some additional funds that we have secured. This will allow us to get some data on annual variation. . We have another proposal in for some additional funding to continue this work but have not heard anything yet.

Prepared by: Date: 19 June 2002